

Illinois Tool III

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 (56) Documents cited  
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(54) Screw anchors for use in masonry

(57) A threaded fastener 10 designed for anchoring embodiment into masonry structures 24 which include relatively hard aggregate. The shank has formed thereon a spaced, helical, continuous thread 12 extending from

the entering portion 13 towards the enlarged head portion 14 for a substantial portion of the length of the shank, the helical thread having a V-shaped cross-sectional configuration with the flanks of the thread intersecting at an included angle  $A_2$  in the range of  $50^\circ$  to  $65^\circ$ , and the helical thread extending about the shank at a lead angle  $A_1$  in the range of  $6^\circ$  to  $8.5^\circ$ . The fastener is inserted with a rotational speed not exceeding 250 RPM at torque levels not less than 150 in. lb. (1700 cm N). A second helical thread may be located intermediate the turns of the main thread and have a smaller crest diameter.

Fig. 1

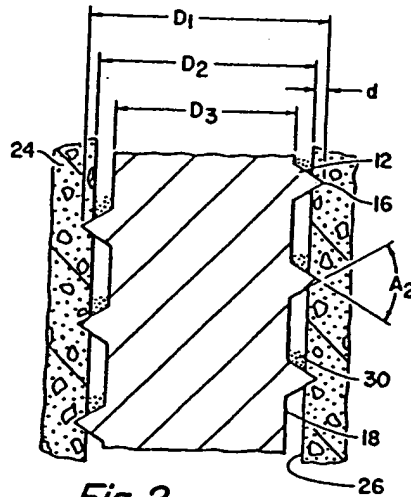
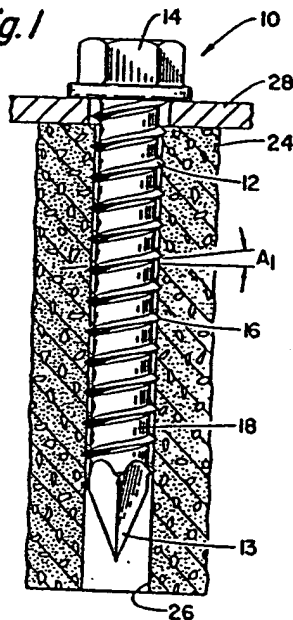


Fig. 2

GB 2 115 511 A

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